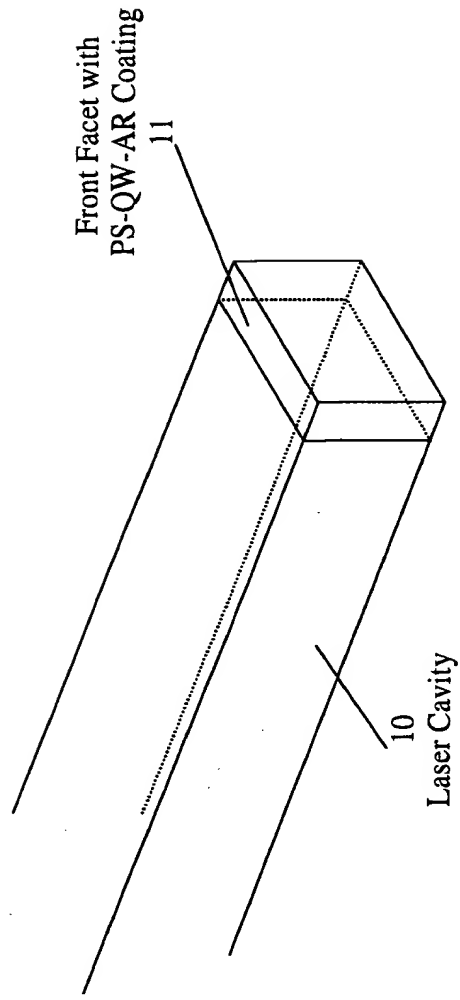


Fig. 1



TOP SECRET

Fig. 2

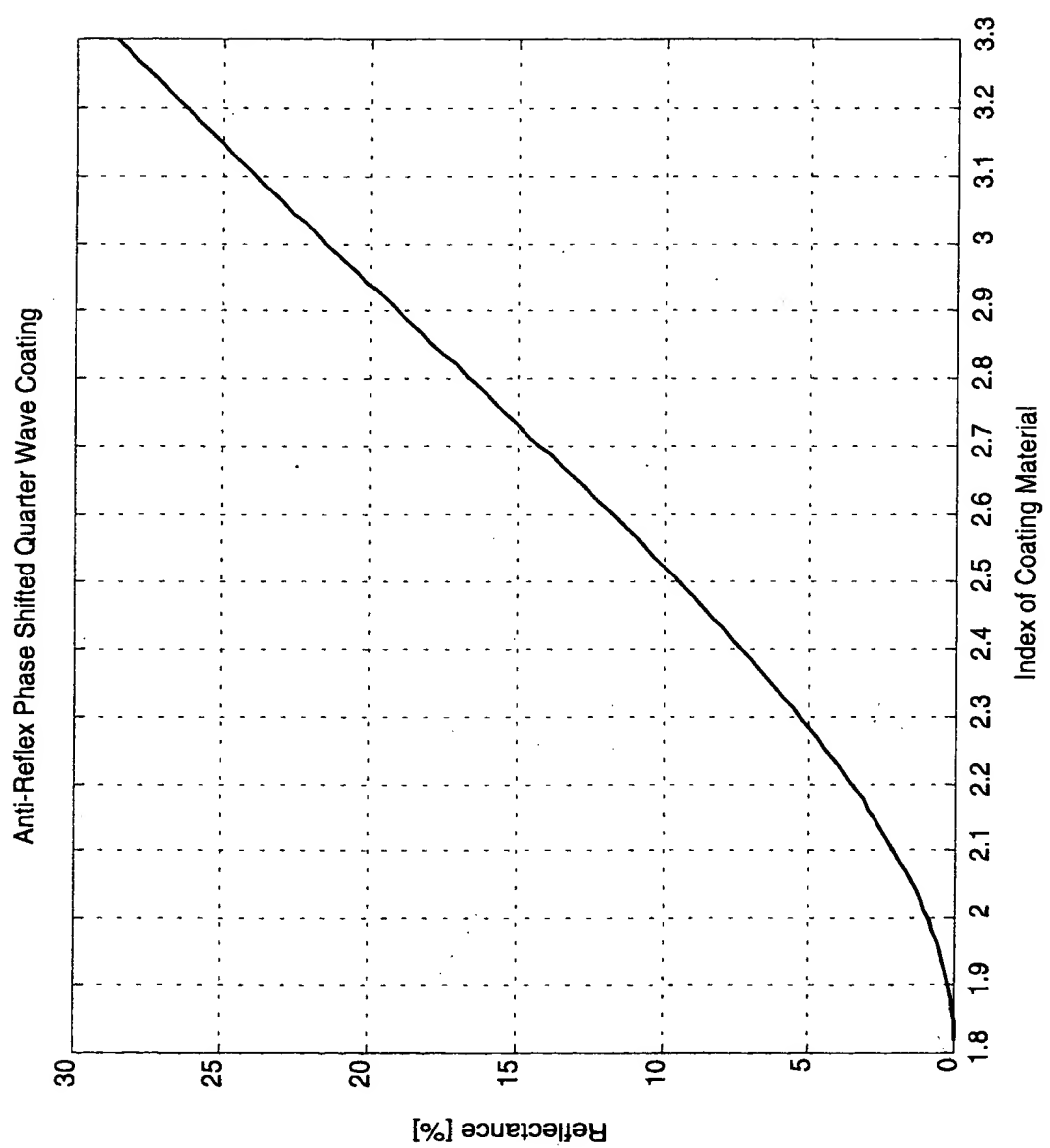


Fig. 3

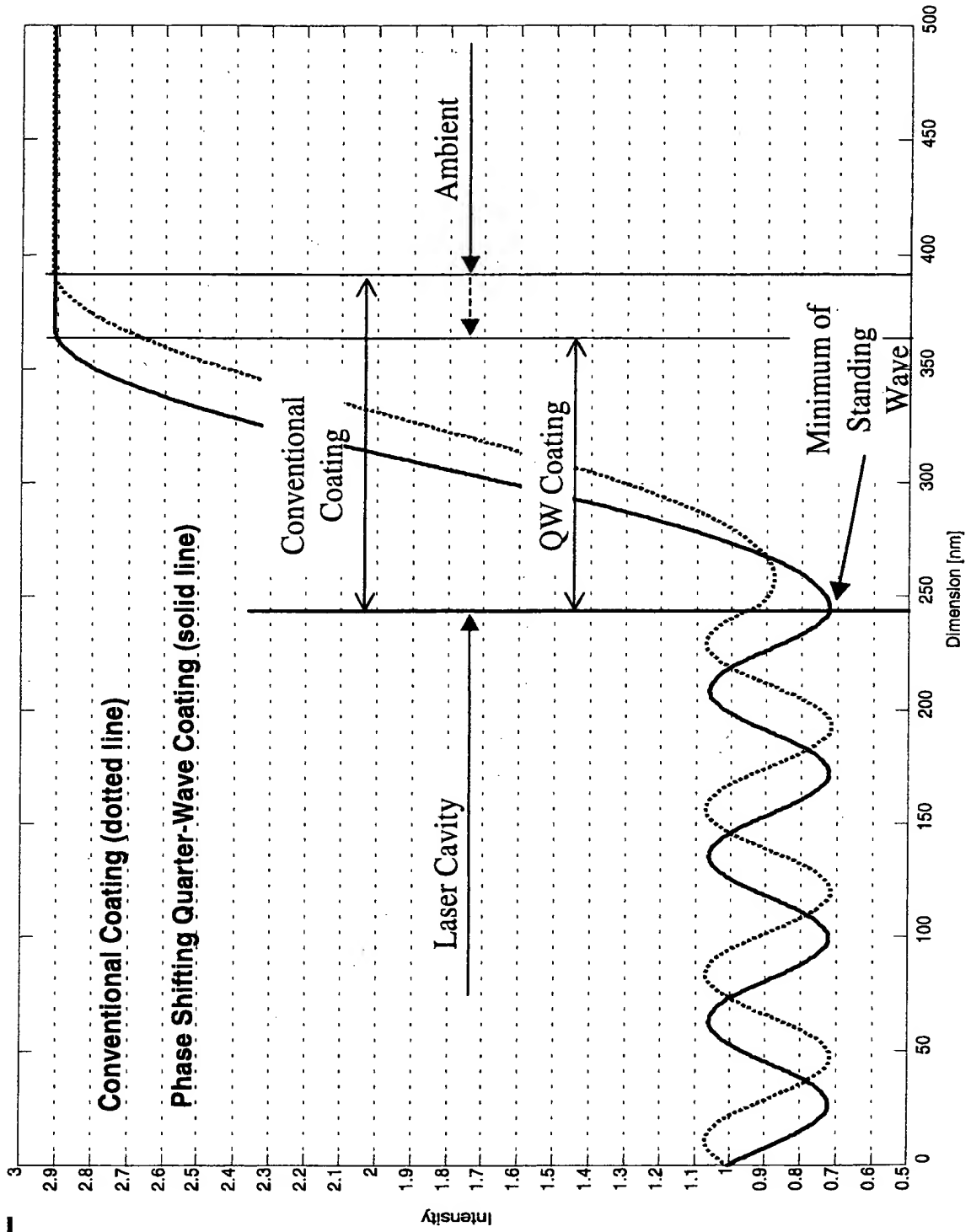


Fig. 4(a)

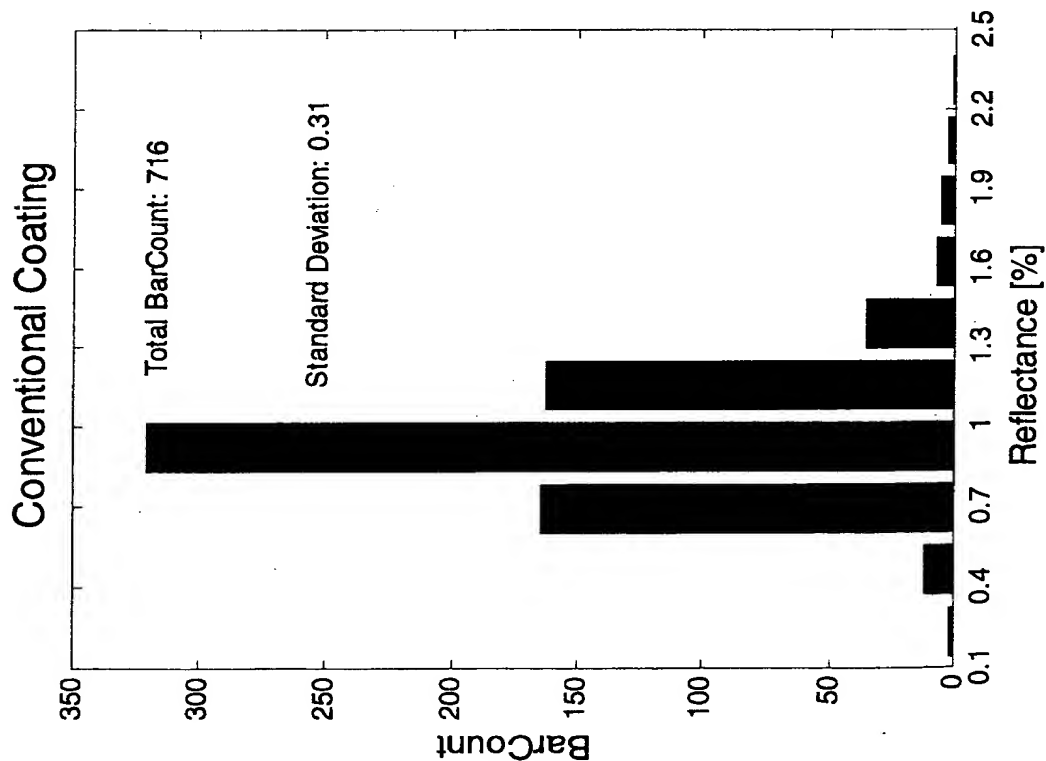


Fig. 4(b)

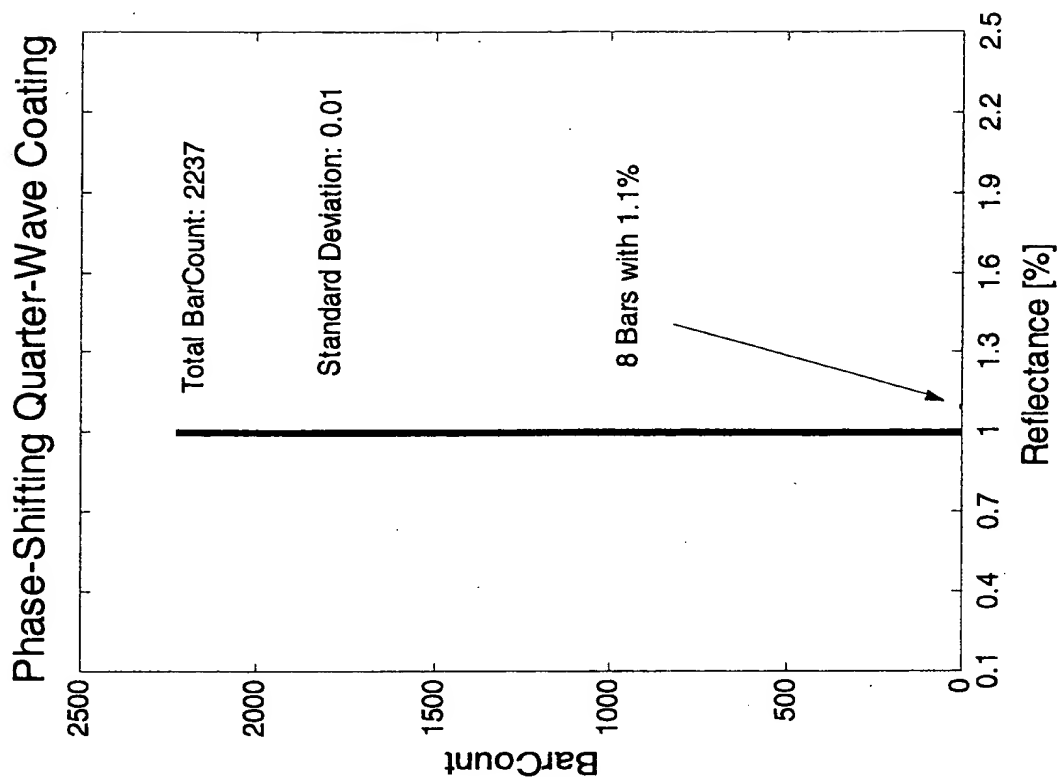
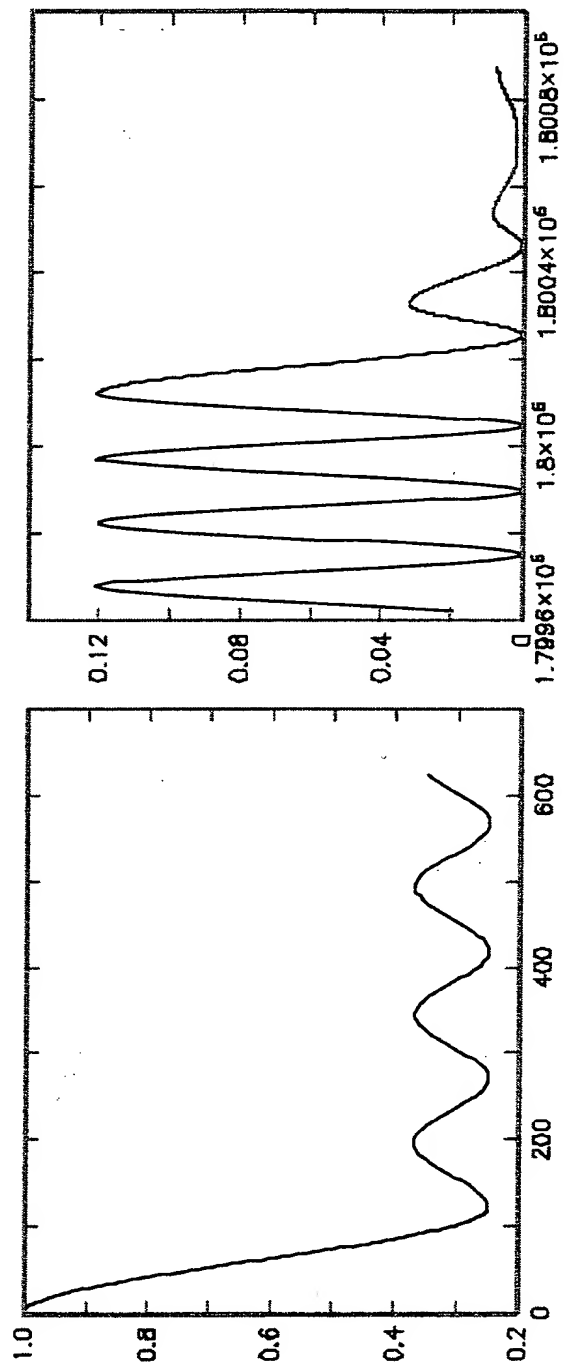
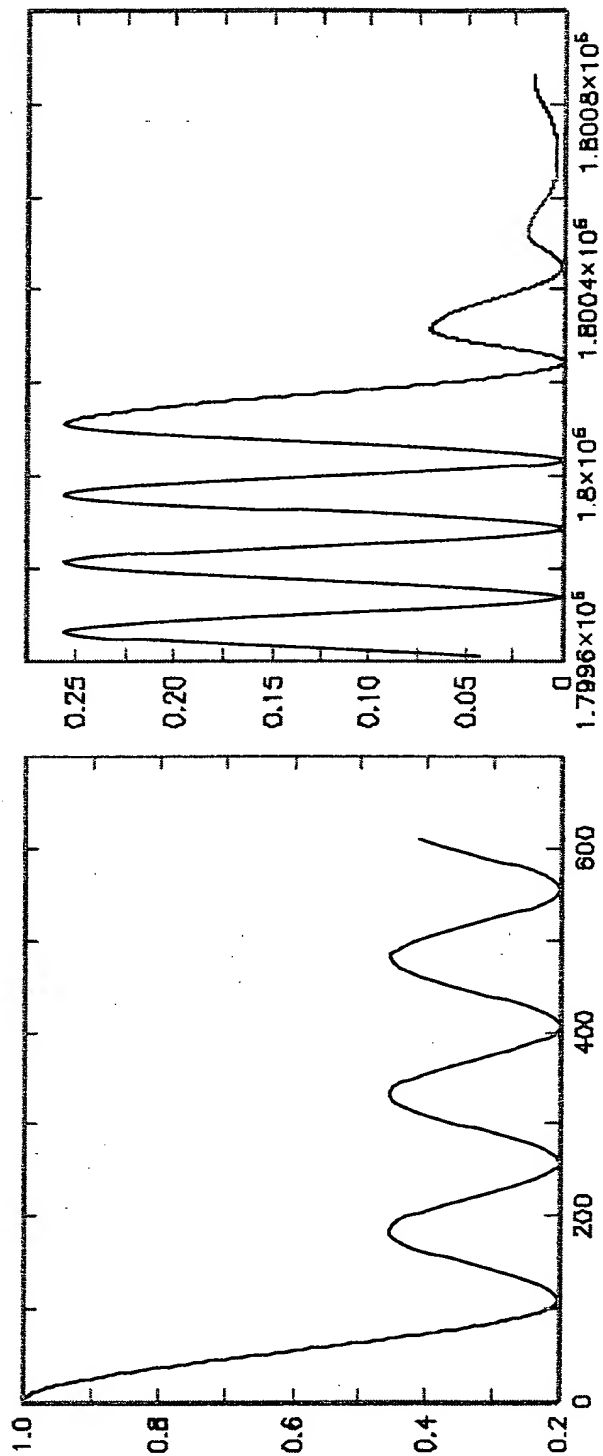


Fig. 5



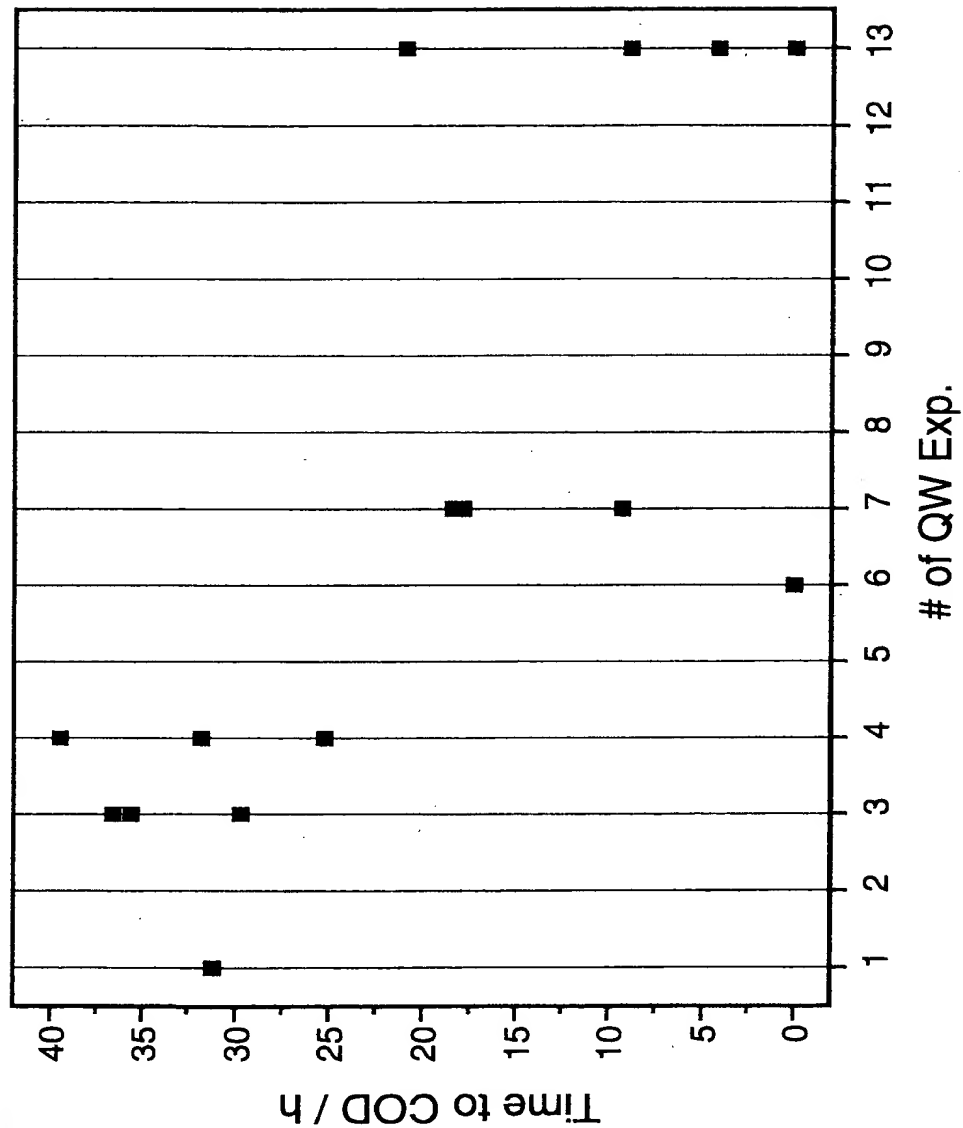
Phase Shifting Quarter Wave Coating with a 1 % Reflectance

Fig. 6



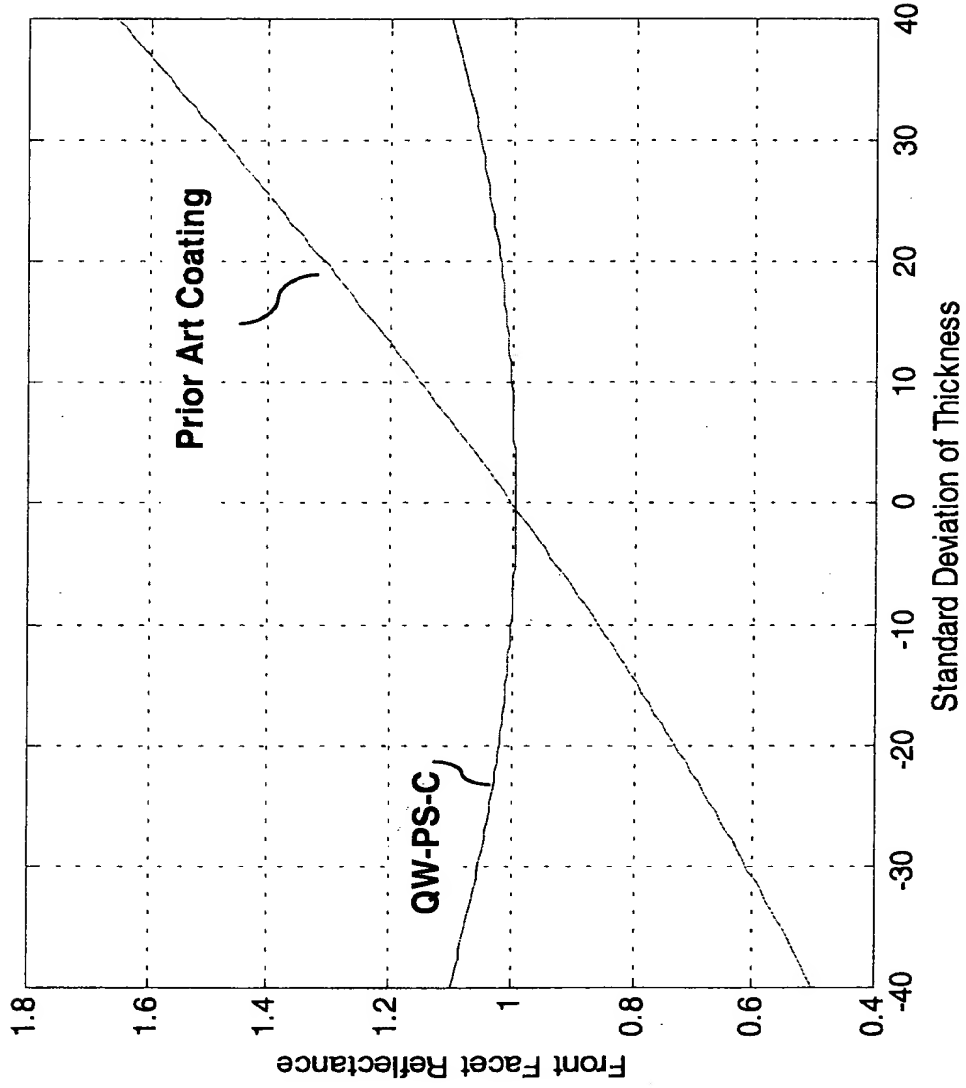
Phase Shifting Quarter Wave Coating with a 4 % Reflectance

Fig. 7



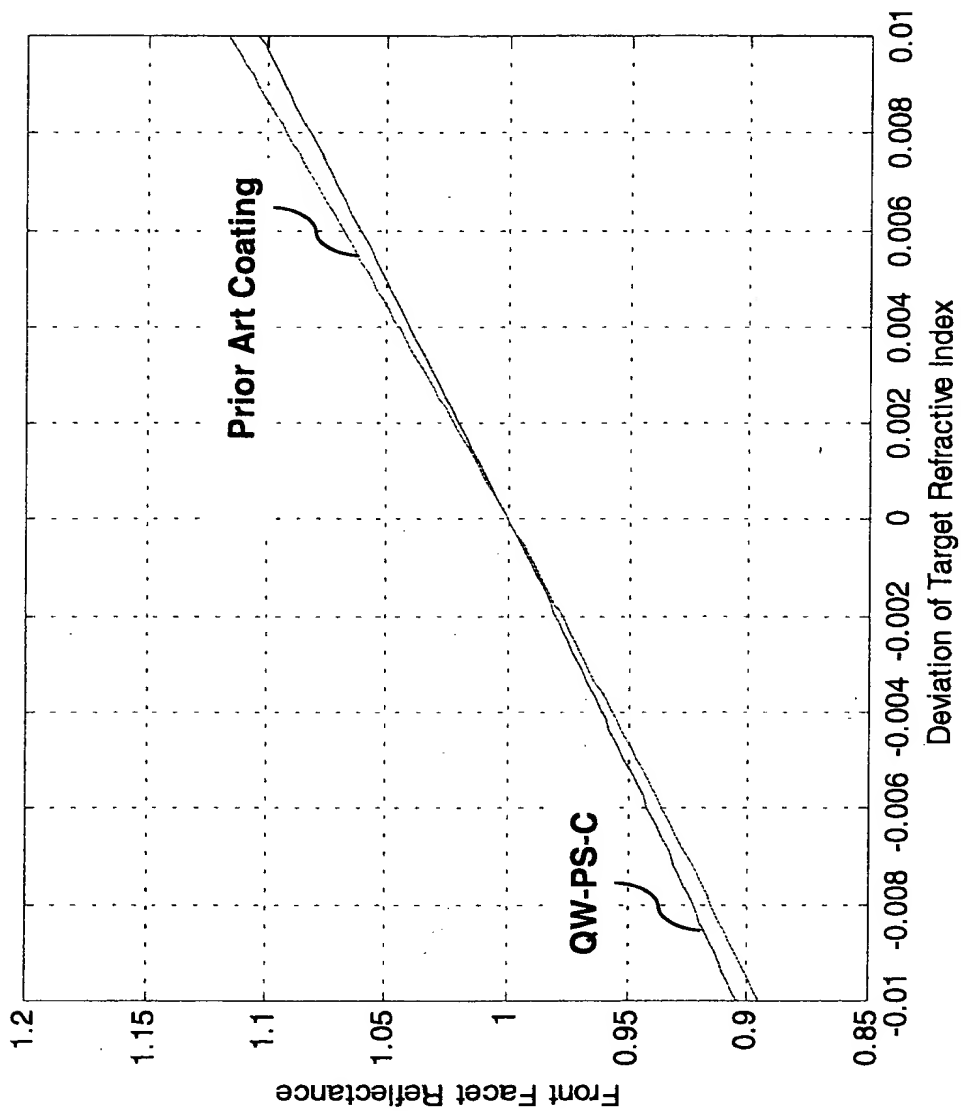
Time to COD vs. # of QW Exp

Fig. 8



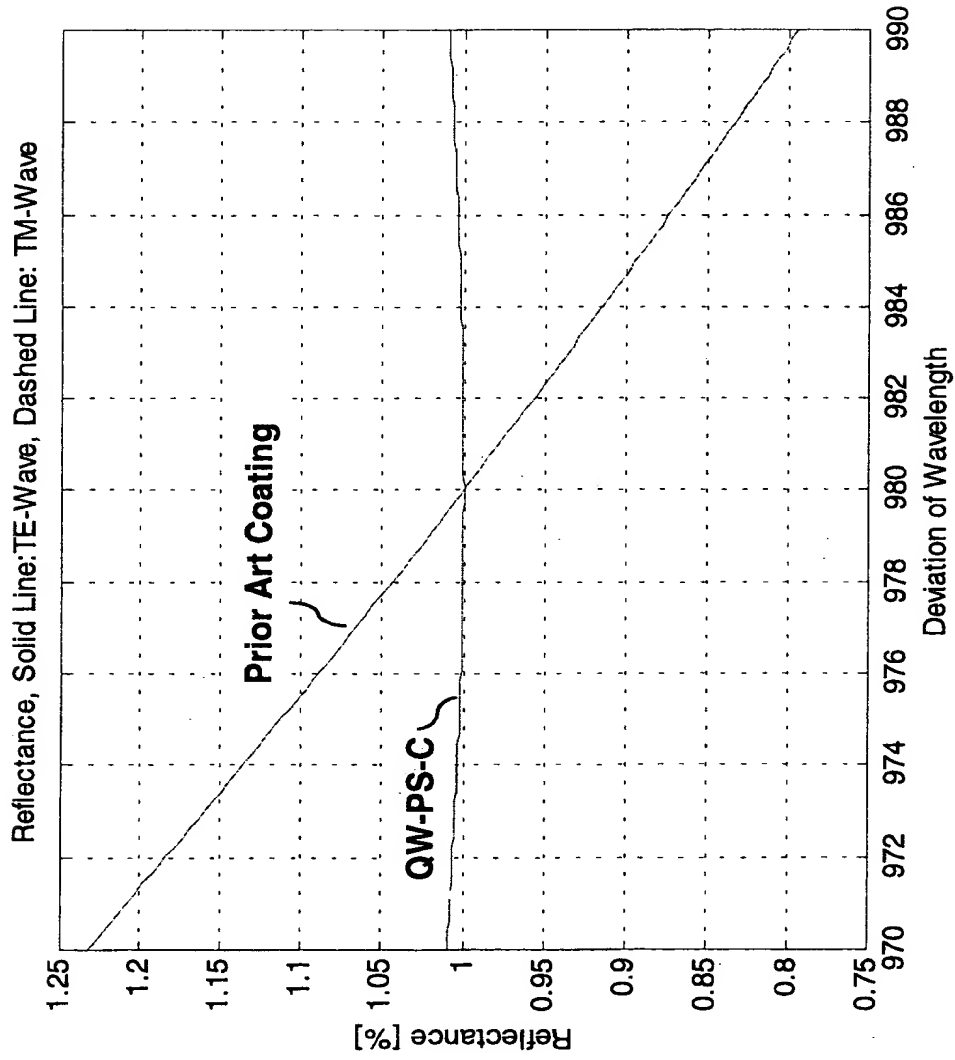
Dependence of reflectance on thickness variation

Fig. 9



Dependence of Reflectance on index variation

Fig. 10



Dependence of reflectance on wavelength variation

Fig. 11**Process parameters**

Coating	2%SiH ₄ /He	N ₂	NH ₃	Plasma Power	Substrate Temp	Pressure
Prior art	300 sccm	330 sccm	Variable (~11.5sccm)	20 Watts	300 °C	1.4 Torr
QW-PS-C	403 sccm	35 sccm	Variable (~12.2sccm)	25 Watts	300 °C	1.4 Torr